CLAIMS

1. Fungicidal compositions characterized in that they comprise A) at least one salt of an alkaline or alkaline-earth metal, Mn or Zn of phosphorous acid and B) at least a second fungicidal component.

2. The fungicidal compositions according to claim 1, characterized in that the fungicidal component B) is selected from:

1) Cymoxanil, corresponding to 1-(2-cyano-2-methoxy imino-acetyl)-3-ethyl urea;

2) IR5885, a dipeptic component corresponding to diastereoisomeric mixtures of methyl [S-(R,S)]-[3-(N-isopropoxycarbonylvalinyl)-amino]-3-(4-chloro-phenyl)propanoate in any proportion, or to one of the two diastereoisomeric forms S-R or S-S, considered singly;

3) Benalaxyl, corresponding to methyl N-(phenyl acetyl)-N-2,6-xylyl-RS-alaninate;

4) IR 6141, corresponding to methyl N-(phenyl acetyl)-N-2,6-xylyl-R-alaninate;

5) Metalaxyl, corresponding to methyl N-(2-methoxy acetyl)-N-2,6-xylyl-RS-alaninate;

6) Mefenoxam, corresponding to methyl N-(2- methoxy acetyl)-N-2,6-xylyl-R-alaninate;

7) Oxadixyl, corresponding to 2-methoxy-N-(2-oxo-1,3-

oxazolidin-3-yl)aceto-2',6'-xylidide;

8) Ofurace, corresponding to DL-3-[N-chloroacetyl-N-(2,6-xylyl)-amino]-γ-butyrolactone;

9) Iprovalicarb, corresponding to O-(1-methyl-ethyl)-N-[2-methyl-1-[[[1-(4-methyl-phenyl)-ethyl]amino] carbonyl]propyl]carbamate,

or Benthiavalicarb-isopropyl corresponding to 'O-isopropyl [(S)-1-{[(1R)-1-(6-fluoro-1,3-benzothiazol-2-yl)ethyl]-carbamoyl-2-methylpropyl]carbamate;

10) Azoxystrobin, corresponding to methyl (E)-2-[2-[6-(2-cyanophenoxy)-pyrimidin-4-yloxy]phenyl-3-methoxy acrylate;

11) Kresoxym-methyl corresponding to methyl (E)-methoxyimino-α-[(o-tolyloxy)-o-tolyl]-acetate;

12) Metominofen, corresponding to N-methyl-(E)-methoxyimino-(2-phenoxyphenyl)acetamide;

13) Acibenzolar, corresponding to methyl benzothiadiazole-7-thiocarboxylate;

14) Famoxadone, corresponding to 5-methyl-5-(4-phenoxyphenyl)-3-(phenylamino)oxazo-lydin-2,4-dione;

15) Fenamidone, corresponding to 4-methyl-4-phenyl-1-(phenylamino)-2-methylthioimidazo-lydin-5-one;

16) Cyazofamide, corresponding to 2-cyano-4-chloro-5(4-methylphenyl)-1-(N,N-dimethylaminosulfamoyl) imidazole;

17) Fluazinam, corresponding to 3-chloro-N-(3-chloro-5-trifluoromethyl-2-pyridyl)-α,α,α-trifluoro-2,6-dinitro-p-toluidine;

18) Dimethomorph, corresponding to (E,Z)-4-[3-(4-chlorophenyl)-3-(3,4-dimethoxyphenyl)-acryloyl] morpholine; or

Flumorph (SYP-L190) corresponding to (E,Z)-4-[3-(4-fluorophenyl)-3-(3,4-dimethoxyphenyl)-acryloyl] morpholine;

19) Flumetover, corresponding to N,N-diethylamide of 4-trifluoromethyl-6-(3,4-dimethoxyphenyl)-benzoic acid;

20) Chlorothalonil, corresponding to 1,3-dicyano-2,4,5,6-tetrachlorobenzene;

21) Thiram, corresponding to bis-(dimethyl-thiocarbamoyl)disulfide (polymer);

22) Propineb, corresponding to the zinc salt of propylenebis(dithiocarbamate) (polymer);

23) Mancozeb, corresponding to the manganese and zinc salt of ethylenebis(dithiocarbamate) (polymer);

24) Maneb, corresponding to the manganese salt of ethylenebis(dithiocarbamate) (polymer);

25) Zineb, corresponding to the zinc salt of ethylenebis(dithiocarbamate) (polymer);

26) Dichlofluanide, corresponding to N-dichloro-

fluoromethylthio-N',N'-dimethyl-N-phenyl sulfamide;

27) Tolylfluanide, corresponding to N-dichloro-fluoro-methylthio-N'-N'-dimethyl-N-p-tolylsulfamide;

28) Captano, corresponding to N-(trichloro-methylthio) cyclohex-4-ene-1,2-carboximide;

29) Folpet, corresponding to N-(trichloro-methylthio) phthalimide;

30) Dithianon, corresponding to 5,10-dihydro-5,10-dioxonaphthol-[2,3-b]-1,4-dithi-in-2,3-dicarbo-nitrile;

31) Etridiazole, corresponding to ethyl-3-trichloromethyl-1,2,4-thiadiazolyl ether;

32) Hymexanol, corresponding to 5-methylisoxazol-3-ole;

33) Protiocarb, corresponding to S-ethyl-(3-dimethylaminopropyl)thiocarbamate;

34) Propamocarb, corresponding to propyl-(3-dimethylaminopropyl) carbamate;

35) A copper (I) or copper (II) salt, such as copper oxychloride, copper hydroxide, or the copper sulfate;

36) Mepanipyrim, corresponding to N-(4-methyl-6-prop-1-inylpyrimidin-2-yl) aniline;

37) Pirymethanil, corresponding to N-(4,6-dimethyl-pyrimidin-2-yl) aniline;

38) Cyprodinil, corresponding to N-(4-methyl-6-cyclopropylpyrimidin-2-yl) aniline;

39) R-3-amino butanoic acid or RS-3-amino butanoic acid;

40) Zoxamide, corresponding to 3,5-dichloro-N-(3-chloro-1-ethyl-1-methyl-2-oxopropyl)-p-toluamide;

41) Salicylic acid or its derivatives, such as copper salts of salicylic acid or of acetyl salicylic acid;

42) Trifloxystrobin, corresponding to methyl (E,E)-methoxyimino-{2-[1-(3-trifluoromethylphenyl)-ethylideneaminooxymethyl]phenyl}acetate;

43) Pyraclostrobin, corresponding to methyl N-(2-{[1-(4-chlorophenyl)-1H-pyrazol-3-yl]oxymethyl}phenyl)-N-methoxy carbamate;

44) Picoxystrobin, corresponding to methyl (E)-2-{2-[6-(trifluoromethyl)pyridin-2-yloxymethyl]-phenyl}-3-methoxyacrylate;

45) Ethaboxam, corresponding to N-(α-cyano-2-thenyl)-4-ethyl-2-(ethylamino)-5- thiazolecarboxamide.

3. The fungicidal compositions according to claim 1, characterized in that the phosphorous acid salt A) is selected from sodium, potassium, magnesium, manganese and zinc salt.

4. The fungicidal compositions according to claim 1, characterized in that component A) is a single salt or a mix of salts of phosphorous acid in any proportion.

5. The fungicidal compositions according to claim 1, characterized in that component A) is a mono- or di-basic salt, or a mixture of the same in any proportion.

6. The fungicidal compositions according to claim 2, characterized in that component B) is selected from IR5885, IR6141, copper (I) and copper (II) salts (such as copper oxychloride, copper hydroxide, tribasic copper sulfate), dithio-carbamates (such as, for example, mancozeb, zineb, propineb), folpet.

7. The fungicidal compositions according to claim 2, characterized in that component B) is selected from IR5885, IR6141, copper oxychloride and mancozeb.

8. The fungicidal compositions according to claim 2, characterized in that they consist of mixtures comprising A) a salt of an alkaline or alkaline-earth metal, Mn or Zn of phosphorous acid, and B) a second fungicide selected from IR5885 or IR6141, or salts of copper (I) or copper (II).

9. The fungicidal compositions according to claim 2, characterized in that they consist of mixtures comprising A) a salt of an alkaline or alkaline-earth metal, Mn or Zn of phosphorous acid, and B) two additional fungicides

selected from IR5885 and Mancozeb, or IR6141 and Mancozeb, or IR5885 and IR6141, or IR5885 and Cymoxanil, or IR5885 and copper (I) salts, or IR5885 and copper (II) salts, or IR6141 and copper (I) salts, or IR6141 and copper (II) salts.

10. The fungicidal compositions according to any of the previous claims, characterized in that the components are present in the following application dosages per hectare:

- 1000 – 4000 g of phosphorous acid salt;
- 5 – 3500 g for each fungicide from 1) to 41), present in the composition.

11. The fungicidal compositions according to any of the previous claims, characterized in that they are formulated as dry powders, wettable powders, emulsifying concentrates, micro-emulsions, pastes, granules, solutions, suspensions, etc..

12. The fungicidal compositions according to any of the previous claims, characterized in that they comprise other compatible active principles such as phytoregulators, antibiotics, herbicides, insecticides, fertilizers.

13. The fungicidal compositions according to any of the previous claims, characterized in that the concentration of active substances ranges from 0.1 to 98%, preferably from 0.5 to 90%.

14. Use of the compositions according to any of the claims 1 to 13 as fungicides in the agronomical field.

15. Use according to claim 14, for the control of phytopathogen fungi such as Plasmopara viticola (vines); Phytophthora infestans (tomatoes, potatoes); Phytophthora nicotianae (tobacco, ornamental plants); Phytophthora palmivora (cacao); Phytophthora cinnamomi (pineapples, citrus fruits); Phytophthora capsici (peppers, tomatoes, cucurbitaceae); Phytophthora cryptogea (tomatoes, thorn-bushes, ornamental plants); Phytophthora megasperma (ornamental plants); Phytophthora citri (citrus fruits); Peronospora tabacina (tobacco); Pseudoperonospora cubensis (cabbages, cucurbitaceae); Pseudoperonospora humili (hops); Bremia (salads).

16. Method for controlling phytopathogen fungi in crops of agricultural and horticultural interest, using the compositions according to any of the claims 1-13.

17. The method according to claim 16, characterized in that the application is effected on any part of the plant by application on the leaves, stems, branches and roots, or on the seeds themselves before sowing, or on the ground in which the plant grows.